



 **CROWCON**  
Detecting Gas *Saving Lives*

Meet the next generation of  
flammable gas detection

August 2021

## Could you – should you – be working safer?

Any failure to accurately detect flammable gases can put assets, raw materials – and, of course, human lives – in danger.

Traditional gas detection technology is usually calibrated to measure a single flammable species, ignoring or inaccurately reading other gases. This causes false and masked alarms, which increase risk and cost your company time, resource and money.

What's more, catastrophic events are all too common. In just one year (2019/20) there were 41 industrial explosions or fires, which between them killed eight people. Clearly, the need for robust detection of flammable gases remains strong, and is crucial to industrial safety. Improvements in gas detection are therefore to be welcomed.

## Meet the next generation of portable flammable gas detection

Crowcon has now integrated the latest MPS™ (molecular property spectrometer) sensors into their portable and fixed single gas detector range. Sensors with MPS™ have TrueLEL™ multi-gas accuracy, and can simultaneously detect over 15 different flammable gases with a single sensor, in any mix, including hydrogen.

With no chemical reaction when it detects combustible gas, and no drift over long periods, the MPS sensor does not require calibration. This reduces the total cost of ownership while improving safety and operational efficiency.

It is also poison resistant and failsafe, regardless of environmental conditions, including in 100% humidity and not impacted by high saturation, compared to existing sensor technologies. What's more, Crowcon's portable flammable gas detector with MPS™ sensor fitted has a greatly improved battery life and can be taken into Zone 0 environments. It is truly the trusted 'take anywhere' flammable gas detector that your applications demand.

## How does it compare to existing technology?

The MPS™ gas sensor is a 21st-century technology that provides the ultimate solution for flammable gas detection. Without any chemical reaction, burning, flame, catalytic oxidation, use of light in interrogation or measurement, nor any reference sensors or beads, this is a unique technology that simultaneously detects more than 15 different flammable gases.

Crowcon has thoroughly tested its XGard Bright fixed detectors with MPS™, infra-red and pellistor sensors reacting live to methane, butane and hydrogen. All instruments were calibrated to 50% LEL methane and exposed to a Tedlar® bag of 10% LEL methane, 10% LEL butane and 20% LEL hydrogen.

All sensors reported some level of gas; the infrared found 21%, the pellistor 32% and the MPS™ sensor found 40%. Only the MPS sensor correctly read the % LEL level and reached the important second alarm level, potentially saving lives.

The evidence is clear – for the most accurate readings in environments where there are multiple flammable gas hazards, just one sensor can keep you, your people and your plant safe; an MPS™ sensor. Now available in Gasman and XGard Bright.